

Drinking Water

CSA 32 (Cantua Creek) Consumer Confidence Report - 07/01/2012



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect your water resources. We are committed to ensuring the quality of your water. Your water source is surface water from the California Aqueduct.

A source water assessment plan is available from our office, which provides more information, such as potential sources of contamination.

This report shows your water quality and what it means.

CONTACT INFORMATION:

If you have any questions regarding this report or concerning your water utility, please contact Joe Prado at (559) 600-4259.

CSA 32 (Cantua Creek) routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2009 through 2011. The State allows us to monitor for some contaminants less than once per year as the concentrations of these contaminants do not change frequently. Some of our data, though representative of the water quality, are more than one year old.

DEFINITIONS:

In this table you will find many terms and abbreviations with which you might not be familiar. To help you better understand these terms, we have provided the following definitions:

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (ng/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (pg/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

Microsiemens per centimeter (uS/cm) - Microsiemens per centimeter is a measure of the

electrical conductivity of a solution.

Millirems per year (mrem/yr) - A measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Variances & Exemptions (V&E) - (mandatory language) State Department of Public Health (CDPH) or U.S. Environmental Protection Agency (EPA) permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Action Level (AL) - (mandatory language) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT) - (mandatory language) A required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are set by the EPA.

Maximum Residual Disinfectant Level (MRDL) - (mandatory language) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - (mandatory language) The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Public Health Goal (PHG) - (mandatory language) The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Primary Drinking Water Standard (PDWS) - (mandatory language) MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Test Results

Contaminant	Violation Y/N	Level Detected	Range of Detection	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Disinfectant Residual							
Chlorine Residual Collection Dates: 01/26/2011- 12/14/2011	N	1.26	0.93-1.8	mg/L	4	4	Water additive used to control microbes
Disinfection Byproducts							
Total HAA5 (Haloacetic acids (HAA5)) Collection Dates: 03/16/2011- 12/14/2011	N	47.5	37-59	ppb	N/A	60	Byproduct of drinking water disinfection
TTHM (Total Trihalomethan es (TTHMs)) Collection Dates: 03/16/2011- 12/14/2011	Y	83	72-94	ppb	N/A	80	By-product of drinking water disinfection
Bromoacetic Acid Collection Dates: 03/16/2011- 12/14/2011	N	0.88	0-1.3	ug/L	N/A	60	Bromoacetic acid is a disinfection byproduct and a member of the haloacetic acid family, which occurs when naturally- occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.

Dibromoacetic Acid Collection Dates: 03/16/2011-12/14/2011	N	4.35	3.5-5.2	ug/L	N/A	60	Dibromoacetic acid is a disinfection byproduct and a member of the haloacetic acid family, which occurs when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Bromoform Collection Dates: 03/16/2011-08/17/2011	N	1.17	0-2.4	ug/L	0	80	Bromoform is a disinfection byproduct from the trihalomethane (THM) family, and is formed when chlorine, chloramines or other disinfectants react with organic and inorganic matter in water.

Organic Chemicals

Bromodichloromethane Collection Dates: 03/16/2011-12/14/2011	N	23.04	3.2-32	ug/L	0	80	Bromodichloromethane is a disinfection byproduct from the trihalomethane (THM) family. Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Chloroform (Trichloromethane) Collection Dates: 03/16/2011-12/14/2011	N	38	24-48	ug/L	70	80	Chloroform is a disinfection byproduct from the trihalomethane (THM) family. Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.

Dibromochloromethane Collection Dates: 03/16/2011-12/14/2011	N	15.25	11-20	ug/L	60	80	Dibromochloromethane is a disinfection byproduct from the trihalomethane (THM) family. Trihalomethanes occur when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Dichloroacetic Acid Collection Dates: 03/16/2011-12/14/2011	N	17.25	14-20	ug/L	0	60	Dichloroacetic acid is a disinfection byproduct and a member of the haloacetic acid family, which occurs when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Chloroacetic acid Collection Dates: 03/16/2011-12/14/2011	N	2.28	0-4.7	ug/L	70	60	Chloroacetic acid is a disinfection byproduct and a member of the haloacetic acid family, which occurs when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.
Trichloroacetic acid Collection Dates: 03/16/2011-12/14/2011	N	22.75	15-30	ug/L	20	60	Trichloroacetic acid is a disinfection byproduct and a member of the haloacetic acid family, which occurs when naturally-occurring organic and inorganic materials in the water react with the disinfectants, chlorine and chloramine.

HEALTH EFFECTS:

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. CSA 32 (Cantua Creek) is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

EXPLANATIONS:

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system.

Please contact our office if you have questions. We at CSA 32 (Cantua Creek) work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements to your water system. The cost of such improvements may be reflected as rate adjustments. Thank you for your understanding.

ADDITIONAL TEST RESULTS

Sampling Results Showing the Detection of Coliform Bacteria					
Microbiological Contaminant	Highest No. of Detections in a Month	No. of Months in Violation	MCL	MCLG	Typical Source of Contaminant
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. coli	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli	0	Human and animal fecal waste

Sampling Results Showing Treatment of Surface Water Sources	
Treatment Technique ^a (Type of filtration technology used)	<i>Direct Filtration</i>
Turbidity Performance Standards ^b (must be met through the water treatment process)	Turbidity of the filtered water must: <ol style="list-style-type: none"> 1. Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2. Not exceed 1.0 NTU for more than eight consecutive hours. 3. Not exceed 5 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standards No. 1	96.8%
Highest single turbidity measurement during the year	0.16
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and

filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

ADDITIONAL TEST RESULTS

Note: The State of California Department of Public Health (CDPH) and the United States Environmental Protection Agency (EPA) do not require annual testing for all constituents often found in water sources. The following information reflects the most recent test results for contaminants that were tested prior to the reporting year of 2011.

Valid Sampling Results of Contaminants From Prior Year Data							
Contaminant	Violation Y/N	Level Detected	Range of Detection	Unit of Measure	MCLG	MCL	Typical Source of Contaminant
Copper Collection Date: 07/27/2010	N	0.018	0.0065-0.043	ppm	AL=1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (as NO3) Collection Dates: 01/06/2010-12/30/2010	N	4.22	0-6.063	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (as N) Collection Dates: 01/06/2009-12/30/2009	N	2.70	0.33-8.4	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Note: Raw samples (from the California Aqueduct) are obtained prior to the filtration and distribution of your water source. Your water source is specifically treated for constituents such as *E. coli* and coliforms before it is distributed for use. These test results do not reflect the quality of water that has been treated and is delivered to you for use. Provision of the following information is required by the State of California Department of Public Health.

Sampling Results of Contaminants From <u>Raw (Pre-treatment) Water</u>							
Contaminant	Violation Y/N	Level Detected	Range of Detection	Unit of Measure	MCLG	MCL	Typical Source of Contaminant
<i>E. coli</i> Collection Dates: 01/10/2011-12/06/2011	Y	2.542	0-10.9	MPN/100mL	0	0	Human or animal fecal waste
Nitrate (as NO3) Collection Dates: 01/06/2011-12/07/2011	N	2.993	2.993-2.993	ppm	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Total Coliforms Collection Dates: 01/10/2011-12/06/2011	Y	189.13	4.1-987.3	MPN/100mL	0	0	Naturally present in the environment